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09/442,676	11/18/1999	GREGORY T. HULAN	PDNO-1099181	6250

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EXAMINER
POON, KING Y

ART UNIT	PAPER NUMBER
2624	

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _04 August 2003_.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _7-9 and 11_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _7-9 and 11_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on _18 November 1999_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Specification

1.   The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP 608.01(o). Correction of the following is required: The controller causes the scan module to print copies of a different size on an additional sheet when the Photo Package entry is selected, found in claims 8 and 11, is subject matter that lacks antecedent basis because they are not in the specifications. Amendment to the specification to show this subject matter is required. (assuming there is no error in the original claims)

For example, page 3, lines 23-30, discloses module 12 is capable of color scanning, print module 14 is used for color printing. Page 6, lines 5-10, teaches block 106 to 112 are repeated for each additional sheet. Page 6, lines 3-4, further states that the print module 14 prints out the raster pattern onto a sheet of photo quality paper (block 112). The specification shows only the print module is capable of printing. How the scan module is used to print additional sheet is unclear in the specification.

The examiner is not sure at this point of time whether claims 8 and 11 that is claiming a scan module to print copies of a different photo size on an additional sheet is a mistake. A phone call to Mr. Richard E. Billion on 2/25/2004, and 2/26/2004, has not resolve this issue. Although, in the initial examination, it appears that it is not a spelling mistake, applicant still needs to clarify this.

The following rejection is assuming that the scan module on line 10, claim 8, and line 16 claim 11, is referring to print module 14 in the specification.

Note: The amendment to the specification is not being entered at this time.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 8, 9, are rejected under 35 U.S.C. 103(a) as being unpatentable over Jamzadeh (US 5,889,578) in view of Hicks (US 4,862,200).

Regarding claim 8: Jamzadeh teaches an apparatus (fig.1, column 3, line 43) for scanning an image (column 3, line 53) and printing copies of the image (column 7, lines 19-25, fig. 8A, fig. 8B) on a sheet, (sheet, column 7, line 50) the apparatus comprising: a scan module; (film scanner 32, fig. 1); a print module (laser writer, 52, fig. 1); an input device (operator interface, column 8, line 17) for allowing a standard photo size (size, column 8, line 57, for the selected image; e.g., 8R, fig. 10, or 4R, column 7, line 50) to be selected (column 8, line 43); and a controller (image data manager/IDM 30, column 3, line 44; IDM controls the system including the scanner, column 3, lines 42-47) for causing the scan module (scanner, column 3, line 51) to scan the image, (second scan for the selected image, column 7, lines 19-25, column 4, lines 1-3), the controller (IDM

30, column 3, line 44) automatically (the resolution of the scanned image used in the interpolation, column 8, lines 1-16 is determined automatically by the IDM from the selected enlargement size, column 7, lines 33-36, column 3, lines 55-63) determining actual size (the number of pixels of the scanned image, column 8, lines 8-16) of the scanned image (the scanned pixels) generating scanned image copies (copies, column 8, line 55, of the interpolated pixels of the image to be printed, e.g., the 2000 dots per scan line for one copy of 4 inches prints, column 8, line 14) that are scaled (scaling the number of pixels of the scanned image to the number of pixels of the printed image by interpolation, column 8, lines 8-17) to the selected photo size, (e.g., 4R, column 7, line 50, column 8, line 13) and that are positioned to utilize maximum printable area on the sheet (nine 4R prints will fill up a sheet with no waste, column 7, lines 49-51. Two 4R one 8R and three 4R are selected to fill a sheet with no waste, column 7, lines 55-65. Since Jamzadeh teaches to arrange copies of photograph to be printed onto a sheet with no waste, Jamzadeh teaches to utilize maximum printable area on a sheet) and causing (IDM 30 controls the printer 60 which includes the laser writer, fig. 1, column 3, lines 44-47) the print module (laser writer, 52, fig. 1) to print the copies on the sheet (column 7, lines 26, 33).

Note: Column 7, lines 19-30, teaches once the scanned image is stored to make a full page print, the printing begins. For example, when a user selects to print nine 4R copies of a selected image, which will make a full page print, column 7, lines 49-52; the printing begins after the selected image is scanned and stored.

Jamzadeh also teaches different photo size is to be printed on an additional

sheet. (Column 7, lines 44-53)

Jamzadeh does not teach wherein the input device allows a Photo Package

entry to be selected, and wherein the controller causes the print module to print copies

of a different photo size to be printed on an additional sheet when the Photo Package

entry is selected.

Hick, in the same area of printing photographs, teaches an input device (a code

button, column six, lines 45) allows a Photo Package entry (package one, column six,

line 45), which contains printing instructions such as printing copies of photograph of

different sizes, to be selected, (column six, lines 20-25, column six, lines 44-50) and

stored in a memory. (Column 6, lines 57-60) The instructions are transferred (column

10, lines 15-20, column 11, lines 25-28, lines 35-43) to a printer for printing the selected

copies of photographs of different sizes.

Therefore, it would have been obvious to a person with ordinary skill in the art at

the time the invention was made to have modified Jamzadeh's input device and

controller to include: the input device allows a Photo Package entry to be selected, and

the controller, that controls the print module, causes the print module to print copies of a

different photo size when the Photo Package entry is selected.

It would have been obvious to a person with ordinary skill in the art at the time

the invention was made to have modified Jamzadeh's input device and controller by the

teaching of Hicks because of the following reasons: Being a competitive business,

there is very little margin for additional overhead costs, and the time is of the essence.

The necessity of offering to a customer a choice creates significant problems of matching a particular subject with the subject's actual photographic order (Hicks, column 40-56). Therefore, the Photo package selection would automate the printing processing by allowing copies of different photographs to be automatically generated by a single entry and thereby, reduces the problem of matching a particular subject with the subject's actual photographic order as well as overhead costs.

Since, in Jamzadeh, the different photo size is printed on an additional sheet, Jamzadeh as modified by Hicks teaches wherein the input device allows a Photo Package entry to be selected, and wherein the means causes copies of a different photo size to be printed on an additional sheet when the Photo Package entry is selected.

Regarding claim 9: Jamzadeh teaches wherein the input device (operator interface, column 8, line 17) prompts for additional standard sizes. (e.g., 8R, 10R, fig. 10)

4.   Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jamzadeh in view of Hicks as applied to claim 8 above, and further in view of Ishikawa et al. (US 6,183,933)

Regarding claim 7: Jamzadeh does not teach wherein the apparatus is an All-in-One machine. Ishikawa teaches a film scanner, (column 63, line 55) a computer, (column 63, line 56) a printer, (column 63, line 56) and a user interface (monitor and

keyboard, column 64, lines 30-31) are constituted as an All-in-One machine. (House in

a single case, column 63, lines 54)

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to have modified Jamzadeh's scan module/scanner,

print module/printer, input device/user interface, and controller/computer to form an

All-in-One machine.

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to have modified Jamzadeh's apparatus by the teaching of

Ishikawa because of the following reasons: (a) it would have simplified the system; and

(b) it would have provided users with convenient because carrying/moving one unit is

easier compare to carrying/moving four units.

5.   Claims 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Jamzadeh (US 5,889,578) in view of Hicks (US 4,862,200) Yamada (US 4,847,662) and

Collard (US 6,236,473).

Regarding claim 10: Jamzadeh teaches an apparatus (fig.1, column 3, line 43)

including a scan module, (film scanner, 32, fig. 1) a print module, (laser printer 52, fig. 1)

an input device, (keyboard 29, fig. 1) a display device, (the device that used for

displaying by the IDM 30, column 7, line 15) and a processor, (image data

manager/IDM 30, column 3, line 44, IDM is used to control the whole apparatus, column

3, lines 42-50), the processor comprising processing sequence of: displaying (fig. 9) a

Photo features entry (menu options to be selected by operator, column 8, lines 37-51)

on the display device; commanding the scan module (film scanner 32, fig. 1) to perform

a pre-scan (column 3, line 58) when the Photo Features entry is selected (the pre-scan

is used to locate an image frame as requested by the operator using user interface,

column 5, lines 25-33, column 7, lines 9-17, column 8, lines 43-51, fig. 7) via the input

device (keyboard are for user input, column 9, lines 60-65); automatically (IDM

computer automatically detects frame line of a frame, column 5, lines 3-10 to locate the

frame for second scan, column 5, lines 23-27) determining an actual size (the frame line

determines the physical extent/size of the frame used for second scan) of an output (the

boundary information of a frame in the scanned pixels, column 5, lines 3-10) of the scan

module after the prescan is performed; commanding the scan module to perform a full

scan (second scan, column 7, lines 19-23, column 3, lines 64-69, column 4, lines 1-3);

generating scaled (scaling the number of pixels of the scanned image to the number of

pixels of the printed image by interpolation, column 8, lines 8-17) copies (copies,

column 8, line 55, e.g., copies of photograph of fig. 8A, fig. 8B) of an output (scanned

pixels from second scan, e.g., column 8, lines 8-16) of the scan module after the full

scan is performed, the copies being scaled to a size indicated by the selected entry

(e.g., 4R, fig. 8A, column 8, line 13, column 8, lines 57-58); utilizing maximum printable

area on the sheet (nine 4R prints will fill up a sheet with no waste, column 7, lines 49-

51. Two 4R one 8R and three 4R are selected to fill a sheet with no waste, column 7,

lines 55-65. Since Jamzadeh teaches to arrange copies of photograph to be printed

onto a sheet with no waste, Jamzadeh teaches to utilize maximum printable area on a

sheet) and causing (IDM 30 control the printer 60 which includes the laser writer, fig. 1,

column 3, lines 44-47) the print module (laser writer, 52, fig. 1) to print the copies on the

sheet (column 7, lines 26, 33).

Note: Column 7, lines 19-30, teaches once the scanned image is stored to make

a full page print, the printing begins. For example, when a user selects to print nine 4R

copies of a selected image, which will make a full page print, column 7, lines 49-52; the

printing begins after the selected image is scanned and stored.

Jamzadeh also teaches different photo size is to be printed on an additional

sheet. (Column 7, lines 44-53)

Jamzadeh does not teach wherein the input device allows a Photo Package

entry to be selected, and wherein the controller causes the print module to print copies

of a different photo size to be printed on an additional sheet when the Photo Package

entry is selected.

Hick, in the same area of printing photographs, teaches an input device (a code

button, column six, lines 45) allows a Photo Package entry (package one, column six,

line 45), which contains printing instructions such as printing copies of photograph of

different sizes, to be selected, (column six, lines 20-25, column six, lines 44-50) and

stored in a memory. (Column 6, lines 57-60) The instructions are transferred (column

10, lines 15-20, column 11, lines 25-28, lines 35-43) to a printer for printing the selected

copies of photographs of different sizes.

Therefore, it would have been obvious to a person with ordinary skill in the art at

the time the invention was made to have modified Jamzadeh's input device and

controller to include: the input device allows a Photo Package entry to be selected, and

the controller, that controls the print module, causes the print module to print copies of a different photo size when the Photo Package entry is selected.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Jamzadeh's input device and controller by the teaching of Hicks because of the following reasons: Being a competitive business, there is very little margin for additional overhead costs, and the time is of the essence. The necessity of offering to a customer a choice creates significant problems of matching a particular subject with the subject's actual photographic order (Hicks, column 40-56). Therefore, the Photo package selection would automate the printing processing by allowing copies of different photographs to be automatically generated by a single entry and thereby, reduces the problem of matching a particular subject with the subject's actual photographic order as well as overhead costs.

Since, in Jamzadeh, the different photo size is printed on an additional sheet, Jamzadeh as modified by Hicks teaches wherein the input device allows a Photo Package entry to be selected, and wherein the means causes copies of a different photo size to be printed on an additional sheet when the Photo Package entry is selected.

Jamzadeh/Hicks does not teach wherein the processor rotates the copies if necessary to utilize maximum printable area on the sheet.

Collard, in the same area of printing images onto a sheet, teaches a control unit (column 7, lines 15-17) rotates (column 1, line 30, column 7, lines 31-32) an image, if necessary, such that the printed image fits the orientation of print area of the sheet.

(Column 1, lines 18-37, fig. 6A, not rotated because it is no needed to be rotated to fit a printable area of a sheet, and fig. 6B, rotated to fit a printable area of a sheet)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Jamzadeh/Hicks's controller/IDM to include: the IDM rotates the images of the copies of the photograph, if necessary, such that the images fit the orientation of the print area designated; for example, 5R of fig. 8B.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Jamzadeh/Hicks's controller/IDM by the teaching of Collard because of the following reasons: (a) it would have allowed pictures of different orientation to fit in the designated area of the sheet, for example, the 5R of fig. 8B would only allow copy of photograph with orientation the same as the orientation of area designated by 5R of fig. 8B. Photographs in different orientation would not fit in the designated area (5R) without rotation; and (b) it would have reduced cost by saving paper from fitting an extra photograph onto a printable area of the paper.

Note: Jamzadeh teaches to fit copies of photograph(s) into designated areas of a sheet which utilize the maximum printable area on the sheet. After the modification, copies of photograph of different orientation are rotated to fit into the designated areas, of the sheet, which utilize the maximum printable area on the sheet. Therefore, Jamzadeh as modified by Collard teaches rotates at least one copy to utilize maximum printable area on the sheet.

Jamzadeh, as modified by Collard/Hicks still do not teach a computer memory for storing a program used to control the processor to carry out the processing sequence.

Yamada, in the same area of using a controller (CPU, column 4, line 67, with a ROM, column 5, line 2) for: controlling a scanner (reader, column 5, lines 5-6) according to data set by an operator, and a printer unit, (column 5, lines 5-8); teaches storing (column 5, line 2) the processing sequence for the processor in controlling the scanner and the printer in a computer memory (ROM, column 5, line 2).
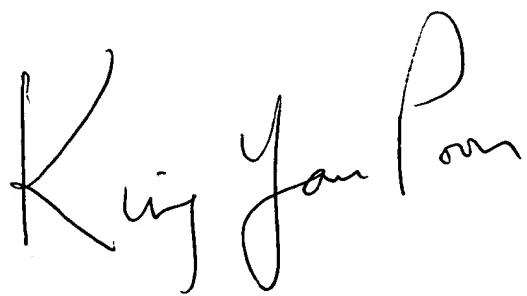
Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Jamzadeh/Collard/Hicks' controller/IDM to include: a computer memory for storing a program used to control the controller to carry out the processing sequence.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Jamzadeh/Collard/Hicks controller/IDM by the teaching of Yamada because of the following reasons: (a) using a program to control a controller would have allowed the controller to be manufactured in large quantities because the same controller would be programmed to perform different functions for other devices, for example, the same kind of controller programmed to be used in a printer would also be programmed and used in a camera. Producing the controller in large qualities reduces the cost of the controller; and (b) storing the program would have prevented losing the processing sequence of the controller.

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to King Y. Poon whose telephone number is (703) 305-
0892

February 26, 2004